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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,503	08/28/2001	Moti Shniberg	U013619-4	6842
7590		08/26/2004	EXAMINER	
Ladas & Parry		MARIAM, DANIEL G		
26 West 61st Street		ART UNIT		
New York, NY 10023		PAPER NUMBER		

2621

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/941,503	Applicant(s) SHNIBERG ET AL.	
	Examiner DANIEL G MARIAM	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/9/01, 5/2/02, & 4/14/03</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9, 11-12, 14-25, 27-28, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (Content-Based Indexing and Retrieval of Visual Information) in view of Oh, et al. (Content-Based Retrieval System for Image Using Human Face Information).

With regard to claim 1, Chang discloses a method for indexing images of persons (See for example, page 45, 1st paragraph) providing image data, i.e., video, relating to said images of persons (which broadly reads on visual information) to a suitably programmed computer; employing a first suitably programmed computer (which corresponds to information extractor) functionality to provide (face) recognition of said images, employing a second suitably programmed computer (given the broadest reasonable interpretation, it reads on the block labeled "subject/topic classifier") which corresponds to functionality to group, i.e., classify and/or group, said images according to (faces) recognized therein; and employing a third suitably programmed computer (given the broadest reasonable interpretation, it reads on the block labeled "indexing") functionality to provide an index of groups of said images organized according to (faces) recognized therein (See page 46, right col., last paragraph – page 47, last paragraph; and Figure 10).

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While Chang discloses the detection and identification of generic visual information, where the visual information grouped and indeed according to the visual information (as shown in Fig. 10), Chang does not expressly call for recognizing faces and indexing according to the recognized faces. However, Oh, et al (Section 1, pages 12-14; and Figs. 1 and 2) teaches this feature. Chang and Oh, et al. are combinable because they are from the same field of endeavor, i.e., Content based search or retrieval (See for example, the Abstract). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Oh, et al. with Chang. The motivation for doing so would at least improve the indexing of the visual information because it will narrow down the index to human faces, and to do so would at least minimize the time taken during retrieval/the creation of indexing the stored images. Therefore, it would have been obvious to combine Oh, et al. with Chang to obtain the invention as specified in claim 1.

With regard to claim 2, a method according to claim 1 employing said index for retrieving images of an individual person (See Fig. 10 of Chang; and Fig. 3 of Oh, et al).

With regard to claim 3, a method according to claim 1 and wherein at least two of said first, second and third suitably programmed computer functionalities are performed by said suitably programmed computer (See Fig. 10 of Chang).

With regard to claim 4, a method according to claim 1 and wherein all of said first, second and third suitably programmed computer functionalities are performed by said suitably programmed computer (See Fig. 10 of Chang).

With regard to claim 5, a method according to claim 2 and wherein at least two of said first, second and third suitably programmed computer functionalities are performed by said

suitably programmed computer (See Fig. 10 of Chang).

With regard to claim 6, a method according to claim 2 and wherein all of said first, second and third suitably programmed computer functionalities are performed by said suitably programmed computer (See Fig. 10 of Chang).

With regard to claim 7, a method according to claim and wherein said index employs a recognized face as an index icon (See Figs. 1 and 2 of Oh, et al).

With regard to claim 8, a method according to claim 1 and wherein said providing image data is carried out via the Internet (the "Network" shown in Fig. 3 of Oh, et al does broadly encompass the "Internet" which is a wide area network).

Claim 9 is rejected the same as claim 8. Thus, argument similar to that presented above for claim 8 is equally applicable to claim 9.

Claim 11 is rejected the same as claim 7. Thus, argument similar to that presented above for claim 7 is equally applicable to claim 11.

Claim 12 is rejected the same as claim 8. Thus, argument similar to that presented above for claim 8 is equally applicable to claim 12.

With regard to claim 14, a method according to claim 1 and wherein said providing image data employs a digital camera (See Fig. 3 of Oh, et al).

Claim 15 is rejected the same as claim 14. Thus, argument similar to that presented above for claim 14 is equally applicable to claim 15.

With regard to claim 16, a method according to claim 2 and also comprising is downloading at least one image (See Fig. 3 of Oh, et al).

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Claims 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 30, 31, and 32 are rejected the same as claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, and 16 respectively, except claims 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 30, 31, and 32 are directed to apparatus claims. Thus, arguments analogous to those presented above for claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, and 16 are respectively applicable to claims 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 30, 31, and 32.

3. Claims 10, 13, 26, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Oh, et al as applied to claims 1-9, 11-12, 14-16 above, and further in view of Gindele, et al. (6,775,407).

With regard to claim 10, Chang (as modified by Oh, et al) discloses all of the claimed subject matter as already discussed above in paragraph 2, and incorporated herein by reference. While Chang (as modified by Oh, et al) discloses digital camera for providing the image data (See Fig. 3 of Oh, et al), Chang (as modified by Oh, et al) does not expressly call for a film camera and a scanner. However, Gindele, et al. (col. 6, line 31-35) teaches this feature. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching as taught by Gindele, et al into the system of Chang (as modified by Oh, et al), if for no other reason than to capture the image data and to produce a digital image data using a film camera and a scanner.

Claim 13 is rejected the same as claim 10. Thus, argument similar to that presented above for claim 10 is equally applicable to claim 13.

Claims 26 and 29 are rejected the same as claims 10 and 13 respectively, except claims 26 and 29 are directed to apparatus claims. Thus, arguments analogous to those presented above for claims 10 and 13 are respectively applicable to claims 26 and 29.

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4. Claims 33-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patton, et al. (6,408,301).

With regard to claim 43, Patton, et al. (hereinafter "Patton") discloses a photography subsystem (which corresponds to camera 10), photographing a plurality of persons in a plurality of scenes, wherein not all of the persons appear in all of the scenes, to provide a plurality of photographs (See for example, Figs. 1 and 3), and a computer analysis and photograph grouping, i.e., the grouping of the captured images (or photos) using representative Picons 23, subsystem, computer analyzing the plurality of photographs to detect at least the faces of persons in each of the scenes (Patton does indeed detect the scene, as shown in Figs. 3, 7 & 8) and automatically grouping the photographs according to at least (the faces of the persons) appearing therein (See for example, col. 4, lines 20-67). Patton does not expressly call for grouping the photographs according to at least the faces of the persons. However, Kim, et al. (item 201, in Fig. 4) teaches this feature.

Patton and Kim, et al. are combinable because they are from the same field of endeavor, i.e., image searching (See for example, Fig. 4). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Kim, et al. with Patton. The motivation for doing so would at least allow the grouping or classifying of the images detected in the scene according to faces of the persons, and to do so would at least minimize the time taken during retrieval of the stored images. Therefore, it would have been obvious to combine Kim, et al. with Patton to obtain the invention as specified in claim 43.

With regard to claim 44, a system for classifying images according to claim 43 and wherein said computer analysis and photograph grouping subsystem also provides indexing said

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plurality of photographs at least partially in accordance with the faces of the persons appearing therein (See for example, col. 4, lines 47-57 of Patton; and item 303, in Fig. 4 of Kim, et al).

With regard to claim 45, a system for classifying images according to claim 43 and wherein: said photography subsystem is operative to photograph said plurality of persons while they are bearing unique identification indications, i.e., grandma x or tagged with sound bytes, in Patton, and said computer analysis and photograph grouping subsystem provides the following functionalities: face recognition of the faces of the persons appearing in said photographs; recognition of said unique identification indications; and correlation said faces with said unique identification indications (See for example, Figs. 7-10).

Claim 46 is rejected the same as claim 45. Thus, argument similar to that presented above for claim 45 is equally applicable to claim 46.

With regard to claim 47, a system for classifying images according to claim 43 and wherein said computer analysis subsystem provides image indication assisted face recognition (See Figs. 3, 7 & 8 of Patton; and Fig. 4 of Kim, et al).

Claim 48 is rejected the same as claim 47. Thus, argument similar to that presented above for claim 47 is equally applicable to claim 48.

With regard to claim 49, a system for classifying images according to claim 45 and wherein said face recognition comprises image indication assisted face recognition (See 3, 7 & 8 of Patton; and Fig. 4 of Kim, et al).

Claim 50 is rejected the same as claim 49. Thus, argument similar to that presented above for claim 49 is equally applicable to claim 50.

With regard to claim 51, a system for classifying images according to claim 45 and wherein said grouping employs said correlation (See for example, Fig. 3 of Patton; and items 301-303 of Kim, et al).

Claim 52 is rejected the same as claim 51. Thus, argument similar to that presented above for claim 51 is equally applicable to claim 52.

Claims 33, 34, 35, 36, 37, 38, 39, 40, 41, and 42 are rejected the same as claims 43, 44, 45, 46, 47, 48, 49, 50, 51, and 52 respectively, except claims 33, 34, 35, 36, 37, 38, 39, 40, 41, and 42 are directed to method claims. Thus, arguments analogous to those presented above for claims 43, 44, 45, 46, 47, 48, 49, 50, 51, and 52 are respectively applicable to claims 33, 34, 35, 36, 37, 38, 39, 40, 41, and 42.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Numbers 5899999, 6381346, 6396963, 6446865, 6698943, and 6771875; Publications to: Ching, et al "Content-based Image retrieval"; Chang, et al. "Visual information retrieval from large distributed online repositories"; Bach, et al. "A Visual information management system for the interactive retrieval of faces"; and Wu "Content-based indexing of multimedia databases".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G MARIAM whose telephone number is 703-305-4010. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LEO BOUDREAU can be reached on 703-305-4607. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DANIEL MIRIAM
PRIMARY EXAMINER

August 16, 2004